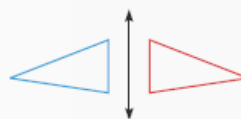


1. What is your name?

**7.1****RIGID MOTION IN A PLANE***Examples on  
pp. 396–398*

**EXAMPLE** The blue triangle is reflected to produce the congruent red triangle, so the transformation is an isometry.



**Does the transformation appear to be an isometry? Explain.**

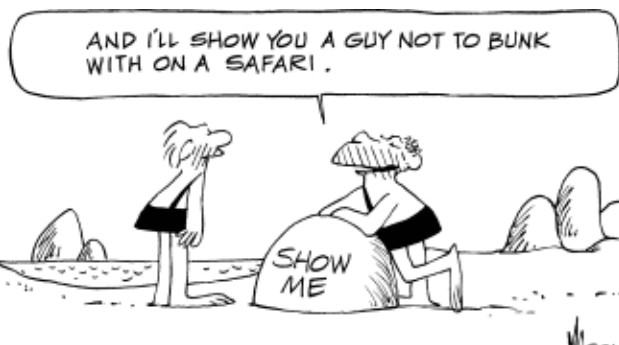
2.



3.



4.

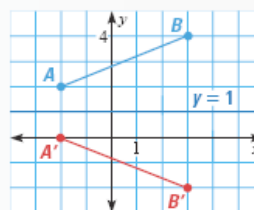


## 7.2

## REFLECTIONS

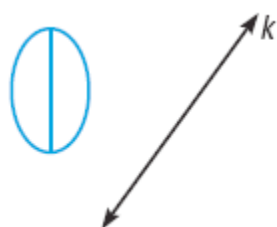
Examples on  
pp. 404–406

**EXAMPLE** In the diagram,  $\overline{AB}$  is reflected in the line  $y = 1$ , so  $\overline{A'B'}$  has endpoints  $A'(-2, 0)$  and  $B'(3, -2)$ .

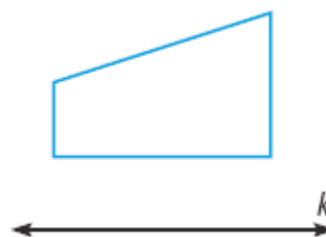


Sketch the reflection.

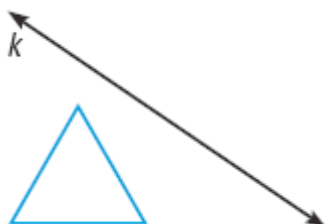
5.



6.



7.



8. Which direction (clockwise or counterclockwise) is a rotation of  $60^\circ$ ?

## 7.4

## TRANSLATIONS AND VECTORS

Examples on  
pp. 421-424**EXAMPLE**

Using the vector  $\langle -3, -4 \rangle$ ,  
 $\triangle ABC$  can be translated to  
 $\triangle A'B'C'$ .

$$A(2, 4)$$

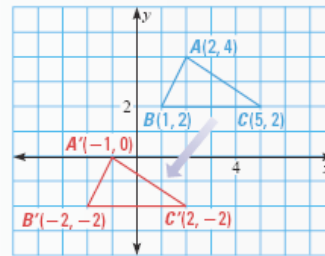
$$A'(-1, 0)$$

$$B(1, 2)$$

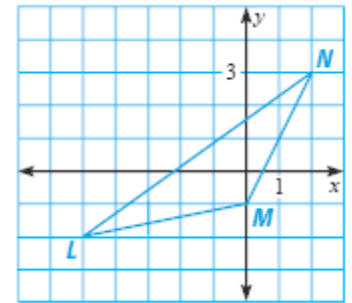
$$B'(-2, -2)$$

$$C(5, 2)$$

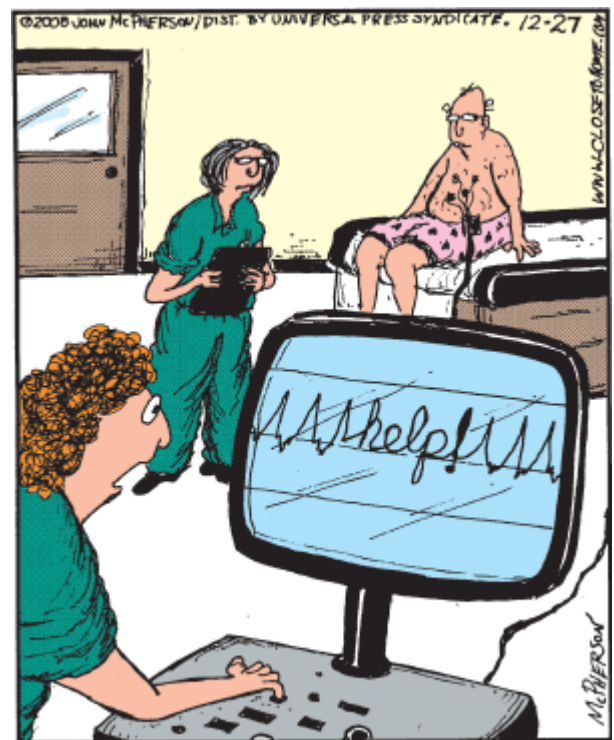
$$C'(2, -2)$$



9. The vertices of the image of  $\triangle LMN$  after a translation are given. Choose the vector that describes the translation.



$L'(-1, -3), M'(4, -2), N'(6, 2)$	A. $\overrightarrow{PQ} = \langle 0, 3 \rangle$
$L'(-5, 1), M'(0, 2), N'(2, 6)$	B. $\overrightarrow{PQ} = \langle -2, 5 \rangle$
$L'(-3, 2), M'(2, 3), N'(4, 7)$	C. $\overrightarrow{PQ} = \langle 4, -1 \rangle$
$L'(-7, 3), M'(-2, 4), N'(0, 8)$	D. $\overrightarrow{PQ} = \langle 2, 4 \rangle$



"Hey, Lori! Take a look at Mr. Geckler's EKG!"

## 7.5

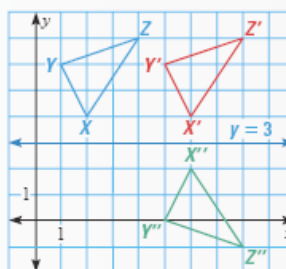
## GLIDE REFLECTIONS AND COMPOSITIONS

Examples on  
pp. 430-432

**EXAMPLE** The diagram shows the image of  $\triangle XYZ$  after a glide reflection.

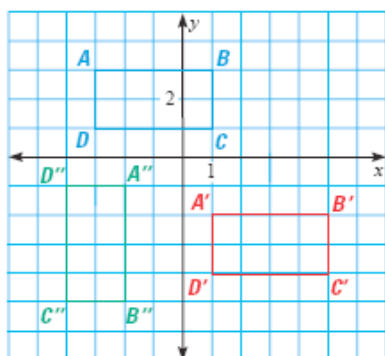
Translation:  $(x, y) \rightarrow (x + 4, y)$

Reflection: in the line  $y = 3$



Describe the composition of the transformations.

10.



11.

